

IN THE CLAIMS

1-36. (cancelled)

37. (new) Double low restorer lines of *Brassica napus* for Ogura cytoplasmic male sterility (cms) presenting a *Rfo* insertion deleted of the radish *Pgi-2* allele and recombined with the *Pgi-2* gene from *Brassica oleracea*, and having an agronomic value characterised by female fertility, a transmission rate of *Rfo* and a vegetative vigour, characterized in that said double low restorer lines of *Brassica napus* for Ogura cms present the combination of five markers selected from the group consisting of PGIo1, PGIUNT, PGIint, BolJon and CP418, wherein said markers comprise the following sequences:

- PGIo1 marker: SEQ ID NO:1;
- PGIUNT marker: SEQ ID NO:2;
- PGIint marker: SEQ ID NO:3;
- BolJon marker: SEQ ID NO:4; and
- CP418 marker: SEQ ID NO:5.

38. (new) Double low restorer lines of *Brassica napus* according to claim 37, wherein the BolJon marker exhibits a radish band, a *Brassica oleracea* band and a *Brassica rapa* band in homozygote of said restorer line.

39. (new) The seeds of *Brassica* plant developed from the *Brassica* line of claim 37.

40. (new) A method for characterising recombined restorer lines of *Brassica napus* for Ogura cms presenting a *Rfo* insertion deleted of the radish *Pgi-2* allele and recombined with the *Pgi-2* gene from *Brassica oleracea*, and having a good agronomic value characterised by female fertility, a good transmission rate of *Rfo* and a high vegetative vigour,

comprising the use of five markers selected from the group consisting of PGIol, PGIUNT, PGIint, BolJon and CP418, wherein said markers comprise the following sequences:

- PGIol marker: SEQ ID NO:1;
- PGIUNT marker: SEQ ID NO:2;
- PGIint marker: SEQ ID NO:3;
- BolJon marker: SEQ ID NO:4; and
- CP418 marker: SEQ ID NO:5.

41. (new) The method according to claim 40, wherein:

- the marker PGIol is amplified using primers PGIol U, comprising SEQ ID NO:6 and PGIol L, comprising SEQ ID NO:7;
- the marker PGIint is amplified using primers PGIint U, comprising SEQ ID NO:8 and PGIint L, comprising SEQ ID NO:9;
- the marker BolJon is amplified using primers BolJon U, comprising SEQ ID NO:12 and BolJon L, comprising SEQ ID NO:13;
- the marker CP418 is amplified using SG129 U and pCP418 L, comprising SEQ ID NO:14;
- the marker PGIUNT is amplified using primers PGIol U comprising SEQ ID NO:6 and PGIint L, comprising SEQ ID NO:9.

42. (new) A method of producing double low restorer lines of *Brassica napus* for Ogura cytoplasmic male sterility (cms) presenting radish introgression carrying the *Rfo* restorer gene deleted of the radish *Pgi-2* allele and recombined with the *Pgi-2* gene from *Brassica oleracea*, and having a good agronomic value characterised by female fertility, a good transmission rate of *Rfo* and a high vegetative vigour, comprising:

- a) crossing double low cms lines of spring *Brassica napus* comprising a deleted radish insertion with the double low line of spring Drakkar for forming heterozygous restored plants of *Brassica napus*;
- b) irradiating before meiosis the heterozygous restored plants

obtained in step a) with gamma ray irradiation;

c) crossing pollen from flowers obtained in step b) with the cms double low spring Wesroona line;

d) testing the progeny with the combination of five markers selected from the group consisting of PGIol, PGIUNT, PGIint, BolJon and CP418; and

e) selecting the progeny lines presenting the combination of said five markers, and wherein said markers comprise the following sequences:

- PGIol marker: SEQ ID NO:1;
- PGIUNT marker: SEQ ID NO:2;
- PGIint marker:SEQ ID NO:3;
- BolJon marker:SEQ ID NO:4; and
- CP418 marker: SEQ ID NO:5.

43. (new) The method of claim 42, wherein said irradiation dose in step b) is 65 Gray during 6 mn.

44. (new) Seeds of a *Brassica* plant developed from the *Brassica* line obtained by the method of claim 42.

45. (new) Seeds of a *Brassica napus* obtained by the method of claim 42 deposited in NCIMB Limited, under reference number NCIMB41183.

46. (new) A method of producing *Brassica napus* hybrid plants and progeny thereof, comprising:

- a) providing a restorer line produced by the method of claim 42 and bred to be homozygous;
- b) using said restorer line in a hybrid production field as the pollinator;
- c) using cms sterile plants in a hybrid production field as the hybrid seed producing plant; and

d) harvesting the hybrid seed from the male sterile plant.

47. (new) Seeds of a *Brassica napus* obtained by the method of claim 46.